DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 82.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-017223
Date Inspected: 23-Sep-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Westmont Industries

OSM Arrival Time: 500
OSM Departure Time: 1330
Location: Santa Fe Springs, CA.

CWI Name:	R. Rodriguez, R. Dominguez	**CWI Present:**	☑ Yes ☐ No
Inspected CWI report:	☐ Yes ☑ No ☐ N/A	**Rod Oven in Use:**	☐ Yes ☐ No ☑ N/A
Electrode to specification:	☑ Yes ☐ No ☐ N/A	**Weld Procedures Followed:**	☑ Yes ☐ No ☐ N/A
Qualified Welders:	☑ Yes ☐ No ☐ N/A	**Verified Joint Fit-up:**	☑ Yes ☐ No ☐ N/A
Approved Drawings:	☑ Yes ☐ No ☐ N/A	**Approved WPS:**	☑ Yes ☐ No ☐ N/A
		Delayed / Cancelled:	☐ Yes ☑ No ☐ N/A

Bridge No: 34-0006
Component: Travelers

Summary of Items Observed:

The Quality Assurance Inspector Sean Vance arrived on site at Westmont Industries (WMI) in Santa Fe Springs, CA, to randomly observe the in process welding of the Travelers. The QA Inspector arrived on site to randomly observe the WMI Quality Control (QC) Inspectors in process and completed visual and nondestructive testing. Upon the arrival of the QA Inspector the following observations were made:

Traveler Test Rack

On this date, the QA Inspector observed Westmont Industries (WMI), production welder Alberto Cortes (WID # 3141) performing Flux Core Arc Welding (FCAW) activities, for the Traveler Test Rack.

The QA Inspector observed that Mr. Cortes was utilizing a Miller brand machine and wire feeder, to perform the FCAW tacking and that Ultracore 71A85 (.045”) diameter wire was being utilized, for the filler metal.

The QA Inspector observed that the FCAW Tacking and grinding activities were being performed on the support column, identified as A-5-M19.

E2/E3-EB Traveler

On this date, the QA Inspector observed Westmont Industries (WMI), production welder Raymundo Anaya, continuing to perform Flux Core Arc Welding (FCAW) fitting activities, for the Traveler Frames. The QA Inspector observed that Mr. Anaya was currently fitting rectangular and square Tube Steel (TS) material for the Traveler Frame identified as A237, reference shop drawing WMI-SAS-237. The QA Inspector observed that the TS material had been previously cut to length and was identified as diagonal bracing, per the shop drawings.

On this date, the QA Inspector observed Westmont Industries (WMI), production welder Eutimo Lopez (WID #

3035), continuing to perform Flux Core Arc Welding (FCAW) activities for the E2/E3-EB Traveler frames.
The QA Inspector observed Mr. Lopez performing the FCAW on previously fit and tack welded Tube Steel (TS) on the Frame Assembly, identified as A237, per the shop drawings.
The QA Inspector observed that Mr. Lopez was utilizing a Miller brand machine and wire feeder, to perform the FCAW and that Ultracore 71A85 (.045") diameter wire was being utilized, for the filler metal. The QA Inspector observed that Mr. Lopez was currently qualified and continued the FCAW, throughout the shift.

On this date, the QA Inspector observed Westmont Industries (WMI), production welder Larry Swanson, continuing to perform Flux Core Arc Welding (FCAW) fitting, tacking and grinding activities for the Traveler Frames. The QA Inspector observed that Mr. Swanson continued to perform these activities on the backing bars, which will be utilized for the Complete Joint Penetration (CJP) Traveler Frame splices, identified as A240 and B240, reference drawing # WMI-SAS-240.
The QA Inspector observed Mr. Swanson continue to cut and bevel 4 each pieces of backing bar material. After the material was cut and beveled, the QA Inspector observed the pieces of material being placed or fit into the end of the TS material. After the pieces were fit, the QA Inspector then observed Mr. Swanson FCAW tack weld the 4 pieces of material and then remove the tack welded backing bar. The QA Inspector then observed Mr. Swanson FCAW the 4 each ends of the backing bar. After the FCAW was complete, the QA Inspector then observed Mr. Swanson grind flush the 4 each welds and then contour or "round off" the corners of the backing bar.
The QA Inspector observed the grinding continued until the completed backing bar, achieved a tight fit on the interior of the TS end. The QA Inspector observed that the backing bar material being utilized was A572 Gr. 50 and listed in the same group as the base metal, per the applicable Welding Procedure Specification (WPS) requirements.

The QA Inspector observed that Smith-Emery QC Inspector Ruben Dominguez was present, during the above mentioned welding and tacking activities and QC Inspector Dominguez explained that approved Welding Procedure Specifications (WPS's) were being utilized. QC Inspector Dominguez explained that the in-process welding parameters were randomly verified including voltage, amperage, pre-heat and travel speed and explained that the parameters were in compliance to the applicable WPS. The QA Inspector randomly verified these parameters and concurred with QC Inspector Dominguez.

See attached pictures below.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Vance,Sean	Quality Assurance Inspector
Reviewed By:	Edmondson,Fred	QA Reviewer